

Claim Amendments and Listing of Claims:

Please amend claims 1-9 and add new claims 11-19, as follows:

1. (Currently amended) An amusement device having a [[A]] control circuit for an amusement device, the control circuit including a sound detector configured to detect audible sound signals and a band-pass filter electrically coupled to the sound detector, the band-pass filter being configured to extract sound signals in a predetermined audible frequency range and to output a corresponding filtered signal, wherein the improvement to the control circuit comprises:

~~a sound detector configured to detect audible sound signals;~~

~~a band-pass filter electrically coupled to the sound detector, the band-pass filter being configured to extract sound signals in a predetermined audible frequency range and to output a corresponding filtered signal;~~

a peak integrator electrically coupled to the band-pass filter, the peak integrator being configured to receive the filtered signal, to average amplitude peaks of the filtered signal and to output a trigger signal based on a predetermined range of the averaged filtered signal; and

a controller electrically coupled to the peak integrator, the controller being configured to receive the trigger signal and to provide at least [[a]] first and second digital control output signals and generate an analog sound output signal in response to the trigger signal, the first and second digital control output signals having have a frequency unrelated to the filtered signal.

2. (Currently amended) The amusement device control circuit according to claim 1, wherein the predetermined frequency range is between about 6.8 KHz and 8.2 KHz.

3. (Currently amended) The amusement device control circuit according to claim 1, wherein the first digital control output signal controls ~~one of~~ a light, a motor and the second digital control output signal controls a motor ~~a sound output device~~.

4. (Currently amended) The amusement device control circuit according to claim 1, wherein the predetermined range of the averaged filtered signal is selected based upon audible frequency characteristics of sound produced by a toy noise maker.

5. (Currently amended) The amusement device control circuit according to claim 4, wherein the toy noise maker is shaken to generate the sound.

6. (Currently amended) The amusement device control circuit according to claim 4, wherein the toy noise maker is a rattle.

7. (Currently amended) The amusement device control circuit according to claim 1, wherein the controller is one of a sound synthesizer, a microcontroller, a microprocessor, and an application specific integrated circuit.

8. (Currently amended) The amusement device control circuit according to claim 1, wherein the sound detector is a microphone.

9. (Currently amended) An amusement device having a [[A]] control circuit for an amusement device, the control circuit including a sound detector configured to detect audible

sound signals and a band-pass filter electrically coupled to the sound detector, the band-pass filter being configured to extract sound signals in a predetermined audible frequency range and to output a corresponding filtered signal, wherein the improvement to the control circuit comprises:

~~a sound detector configured to detect audible sound signals;~~

~~a band-pass filter electrically coupled to the sound detector, the band-pass filter being configured to extract sound signals in a predetermined audible frequency range and to output a corresponding filtered signal;~~

a peak integrator electrically coupled to the band-pass filter, the peak integrator being configured to receive the filtered signal, to average amplitude peaks of the filtered signal and to output a trigger signal based on a predetermined range of the averaged filtered signal; and

a controller electrically coupled to the peak integrator and to the sound detection circuit, the controller being configured to receive the trigger signal and to provide at least [[a]] first and second digital control output signals in response to the trigger signal, the first digital control output signal disabling the sound detection circuit for a predetermined period of time after receiving the trigger signal and the second digital control output signal controlling one of a light and a motor.

10. (Previously presented) A control circuit for an amusement device, wherein the control circuit comprises:

a sound detector configured to detect audible sound signals;

a band-pass filter electrically coupled to the sound detector, the band-pass filter being configured to extract sound signals in a predetermined audible frequency range and to output a corresponding filtered signal;

a peak integrator electrically coupled to the band-pass filter, the peak integrator being configured to receive the filtered signal, to average amplitude peaks of the filtered signal and to output a trigger signal based on a predetermined range of the averaged filtered signal; and

a controller electrically coupled to the peak integrator, the controller being configured to receive the trigger signal and to control a light, a motor and a sound output device in response to receiving the trigger signal.

11. (New) A toy set comprising:

a first amusement device that mechanically generates sound in a predetermined audible frequency range when manipulated by a user, the first amusement device being configured to be functionally responsive to manipulation by an infant; and

a second amusement device having a control circuit, a light, a motor and a sound output device, the control circuit including:

a sound detector configured to detect audible sound signals generated by the first amusement device;

a band-pass filter electrically coupled to the sound detector, the band-pass filter being configured to extract sound signals in the predetermined audible frequency range and to output a corresponding filtered signal;

a peak integrator electrically coupled to the band-pass filter, the peak integrator being configured to receive the filtered signal, to average amplitude peaks of the filtered signal and to output a trigger signal based on a predetermined range of the averaged filtered signal; and

a controller electrically coupled to the peak integrator, the light, the motor and the sound output device, the controller being configured to receive the trigger signal and to provide a first digital control output signal to the light, provide a second digital control

output signal to the motor and generate an analog sound output signal to the sound output device in response to the trigger signal, the first and second digital control output signals have a frequency unrelated to the filtered signal.

12. (New) The toy set according to claim 11, wherein the first amusement device is shaken to generate the sound in the predetermined audible frequency range.

13. (New) The toy set according to claim 12, wherein the first amusement device is a rattle with a handle sized to be grasped and shaken by an infant.

14. (New) The toy set according to claim 11, wherein the second amusement device is a toy doll including a rocking mechanism mechanically coupled to the motor, the rocking mechanism causing the toy doll to bend in at least one direction when the motor is activated.

15. (New) The toy set according to claim 11, wherein the controller is one of a sound synthesizer, a microcontroller, a microprocessor, and an application specific integrated circuit.

16. (New) The toy set according to claim 11, wherein the sound detector is a microphone.

17. (New) The toy set according to claim 11, wherein the sound output device is a speaker.

18. (New) The toy set according to claim 11, wherein the controller disables the sound detection circuit for a predetermined period of time after receiving the trigger signal.

19. (New) An amusement device having a control circuit, the control circuit including a sound detector configured to detect audible sound signals and a band-pass filter electrically coupled to the sound detector, the band-pass filter being configured to extract sound signals in a predetermined audible frequency range and to output a corresponding filtered signal, wherein the improvement to the control circuit comprises:

a peak integrator electrically coupled to the band-pass filter, the peak integrator being configured to receive the filtered signal, to average amplitude peaks of the filtered signal and to output a trigger signal based on a predetermined range of the averaged filtered signal; and

a controller electrically coupled to the peak integrator, the controller being configured to receive the trigger signal and to control a light, a motor and a sound output device in response to receiving the trigger signal.